Site Summary Update **December 1999**

SPRUCE PARK TRAILER PARK

Alaska Department of Environmental Conservation ● Division of Spill Prevention and Response

Site Description

The subject property is a 4.3-acre tract of land situated between 70th and 72nd Avenues on Lake Otis Parkway in Anchorage, Alaska. It was first developed as a mobile home court in 1962 and currently has spaces for 43 mobile homes. It was originally served by on site water and septic systems but has since been converted to public utilities (water, sewer, natural gas). It had a heating fuel distribution system prior to the installation of natural gas that consisted of a 2,500-gallon underground storage tank (UST) and a pipeline of underground ½ inch copper lines to all of the trailer spaces via three manifolds.
The former fuel line distribution system and the septic cribs have been identified as sources of hazardous substance contamination.

Threats and Contaminants

The contaminants of concern at this site are primarily solvents and diesel fuel. They include: halogenated volatile organics (HVO); diesel range organics (DRO); polynuclear aromatic hydrocarbons (PAH); and benzene, toluene, ethylbenzene, and xylene (BTEX).
There are three areas of petroleum product identified on the groundwater and information indicates that most, if not all, of the subsurface soil contamination originated from the underground diesel fuel distribution system and the on-site septic cribs.

Public Health and Environmental Concerns

A site investigation conducted in 1993 identified at least 79 water wells within a ¼ mile radius of the site. In 1994, four of the eleven drinking water wells in the immediate vicinity of the crib were sampled. One sampled at the tap contained 3.3 µg/l isopropyltoluene which is a chemical that has no established State or Federal cleanup level at the present time. The nature and extent of groundwater impacted by hazardous substance contamination must be further assessed. There is a potential risk to human health from ingesting water from private water wells in the area.
A summary of the available information identifies that:

- most of the water wells were drilled in the mid 1970's and early 1980's;
- recorded well depths generally range from 85 to 110 feet bgs;
- static water levels tend to range between 30 and 50 feet bgs; and,
- the soil boring logs for these wells generally classify the subsurface as clay and gravel from approximately 15 feet to as deep as 120 feet bgs.

It is uncertain whether these soils would serve to restrict contaminant migration to the depth which groundwater is extracted for use as drinking water. The nature and extent of soil contamination has not been fully characterized to determine what risk (if any) it poses to human health or the environment.

Response Actions

The site is currently owned (and managed) by the Federal Deposit Insurance Corporation (F.D.I.C.).
The following investigations have been conducted at the site:
A 1992 investigation identified:

- an abandoned vehicle autobody repair facility with a 500-gallon heating oil UST, and a shop floor drain (possible paint solvent discharge).
- a 2,500 gallon UST used to store heating oil and a buried pipeline distribution system;
- a 500 gallon gasoline UST for trailer park facility vehicles; and
- a pumphouse building.

Samples of the liquid from each of the three USTs contained elevated levels of HVOs. Reportedly the USTs have been taken out of

service since 1980 when the site converted to natural gas.

In 1993, an underground disposal crib was investigated. Elevated petroleum and HOV concentrations were detected in subsurface soil. Free-phase petroleum product was identified on the groundwater in one monitoring well (MW) and HVO including tetrachloroethylene (PCE) above maximum contaminant levels (MCLs) was detected in another MW. Investigation of groundwater revealed 2.16 to 24.6 inches of heating oil between October 1993 and December 1994.

In 1994, the USTs and portions of the fuel distribution lines were removed. An investigation of the fuel dispensing area and the fuel manifold stands was conducted which identified elevated levels of petroleum hydrocarbon soils below the oil distribution pump house and manifolds. An on-site water well and three MWs were decommissioned.

In 1995, the log crib at the autobody shop was removed and 42 cubic yards of soil were excavated. 40 cubic yards of soil were returned to the excavation based on the analytical results not exceeding recommended PCE cleanup concentrations at the time (10 mg/kg). Groundwater was not investigated directly beneath the log crib but analytical results from MW-1 situated 10 to 15 feet north of the former crib contained elevated HVOs.

In October 1996 a water main broke on the southern portion of the property and petroleum hydrocarbon contaminated soils were encountered during the repair efforts. Soil was excavated and stockpiled on-site. Efforts were also employed to delineate the extent of free-phase petroleum product. Measurable product was observed in two MWs and a petroleum sheen detected in a third well.

In 1997, hand soil borings were installed near a fuel distribution manifold and at the pump house. Low level petroleum hydrocarbons were measured in the soil but groundwater could not be sampled due to lack of water in the monitoring wells.
A geophysical investigation of the site was performed to map the underground fuel distribution system. It was unsuccessful due to the many surface obstacles and subsurface utilities located in the area.
During an another investigation in 1997, further efforts were employed to delineate the groundwater plume and evaluate the potential for on-site or off-site migration. The investigation identified a third area of free product and also detected HVOs and petroleum hydrocarbons in another MW suspected to originate from the community septic system.

The 1998 site work confirmed three areas of free-phase product and identified a fourth suspect area.

Current Status

F.D.I.C. is currently attempting to sell the property. They have not conducted any additional investigative and/or cleanup actions since August 1998. The current status of hazardous substance contamination at the site consists of an unknown amount of petroleum impacted soil and three areas of free product on the groundwater. However, only portions of the site have been investigated and the entire site must be assessed for hazardous substance contamination. The former heating fuel distribution system may have to be removed and an investigation of the soil conducted. The former park community septic system requires investigation and possible removal. Groundwater in the vicinity of the former autobody shop requires monitoring for VOC's.